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The Psilidae (Diptera) from North Korea, with Descriptions of Two New Species¹⁾

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Abstract Nine species belonging to 3 genera, *Chyliza*, *Psila* and *Loxocera* of the Psilidae are reported from North Korea. Of them, *Chyliza acuta* and *Psila* (*Psila*) *shatalkini* are described as new to science, and 7 species are newly recorded from the Korean Peninsula. *Chyliza abstrusa* SHATALKIN is synonymized with *C. takagii* IWASA.

Key words: Diptera; Psilidae; new species; new records; new synonym; North Korea.

Introduction

The Psilidae is distributed in the Holarctic, Oriental and Afrotropical Regions and well represented in the Palaearctic Region (HENNIG, 1941; COGAN, 1977; SOÓS, 1984). The flies of this family of the Far East have been reported from Russia (SHATALKIN, 1983, 1986, 1989 and 1992), Mongol (SOÓS, 1974), China (WANG and YANG, 1989) and Japan (IWASA, 1987, 1989, 1991 and 1992), however, little is known from the Korean Peninsula.

Recently we had a chance to examine the psilid specimens collected by the Entomological Expedition organized on the basis of the Czechoslovak-Korean Cultural Agreement. As a result of the examination, 9 species belonging to 3 genera were determined. In the present paper, we describe two new species and give 7 newly recorded species from North Korea. The type-specimens of this study are deposited in the Slovakian National Museum, Bratislava, Slovakia.

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Chyliza annulipes MACQUART, 1835

Chyliza annulipes MACQUART, 1835, Hist. nat. Inst., Dipt., 2: 380.

Specimens examined. 1♂, 2♀, Suyangsan Mts. 10 km NW of Haeju, 6–11 May 1988, M. SLOVAK; 1♂, same locality, 6 May 1988, M. KOZÁNEK.

Ditribution. Europe, Russia, North America, Japan (Hokkaido) and North Korea. New to the Korean Peninsula.

Chyliza takagii IWASA, 1989

Chyliza takagii IWASA, 1989, Jpn. J. Ent., 57: 150–152.

Chyliza abstrusa SHATALKIN, 1989, Arch. zool. Mus. Moscow State Univ., 27: 105. Syn. n.

Chyliza takagii IWASA and *C. abstrusa* SHATALKIN were described in the same year from Japan (Hokkaido) and Russia (Far East), respectively; description of *takagii* was published at several month before that of *abstrusa*. Recently, one of the authors (IWASA) received a personal information from Dr. SHATALKIN who re-examined the type-specimen of *abstrusa* and description and illustrations of *takagii*. According to his letter, *C. abstrusa* is identical with *C. takagii*. Therefore, the authors decided that *C. abstrusa* SHATALKIN is a synonym of *C. takagii* IWASA.

Specimen examined. 1♀, Paekdusan Mts., Onsupjong, 19 Aug. 1989, M. KOZÁNEK.

Distribution. Russia (Far East), Japan (Hokkaido) and North Korea. New to the Korean Peninsula.

Chyliza dicheta SHATALKIN, 1989

Chyliza dicheta SHATALKIN, 1989, Arch. zool. Mus. Moscow State Univ., 27: 105.

Specimens examined. 1♂, Myonyangsan Mts., 5 km SW of Hyangsan, 4 Aug. 1989, M. KOZÁNEK; 1♂, Tokkol Valley, Myonyangsan Mts., 3 Aug. 1989, M. KOZÁNEK; 1♀, Ryongaksan Mts., 10 km W of Pyongyang, 14 May 1988, M. KOZÁNEK.

Distribution. Russia (Far East) and North Korea. New to the Korean Peninsula.

Chyliza zhelochovtsevi SHATALKIN, 1989

Chyliza zhelochovtsevi SHATALKIN, 1989, Arch. zool. Mus. Moscow State Univ., 27: 112.

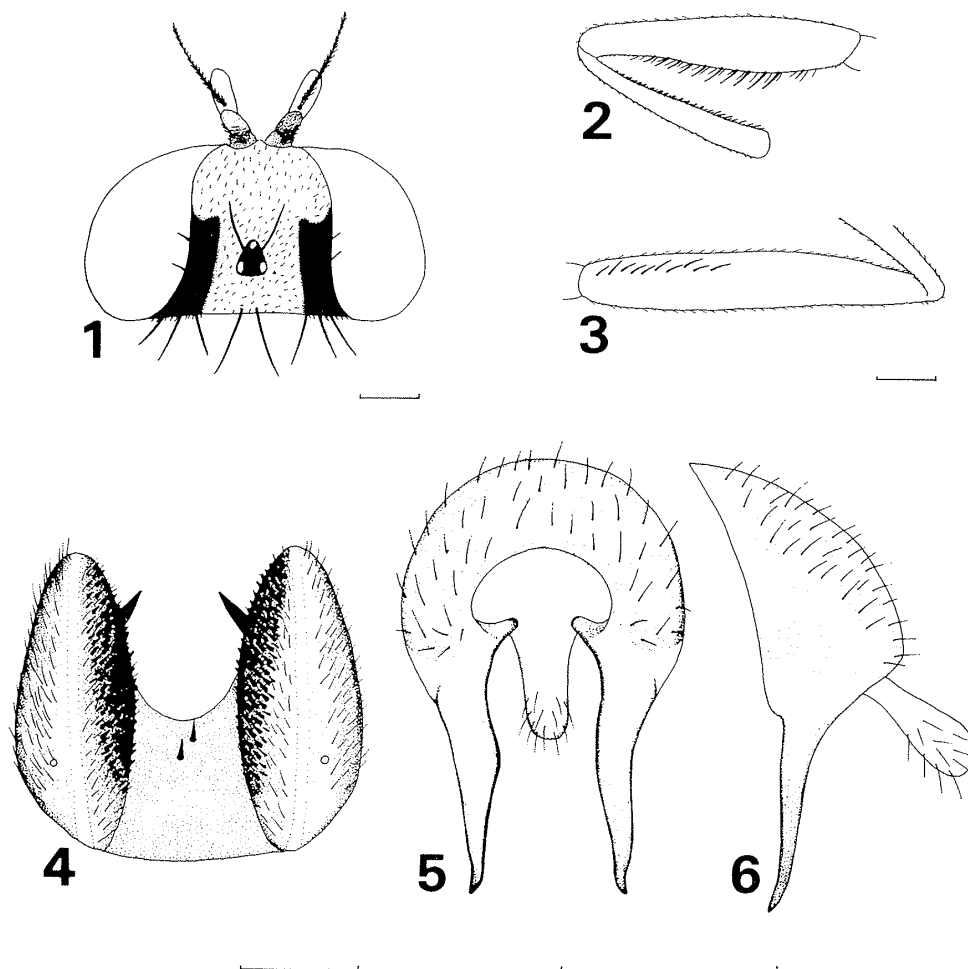
Specimens examined. 1♂, Suyangsan Mts., 10 km NW of Haeju, 8 May 1988, M. KOZÁNEK; 1♀, Wonsan, Botanic Garden, 28 May 1988, M. KOZÁNEK.

Distribution. Russia (Far East) and North Korea. New to the Korean Peninsula.

Chyliza acuta IWASA, n. sp.

(Figs. 1-6)

♂. Head: eyes reddish brown; frons yellow with blackish stripes along posterior half of eye margin (Fig. 1); ocellar triangle small; face light yellow; facial orbit narrow and yellow; gena black with narrow yellowish band along



Figs. 1-6. *Chyliza acuta* n. sp. — 1, Head, dorsal view; 2, male fore femur and tibia (left), posterior view; 3, male mid femur (left), ventral view; 4, 6th abdominal sternite of male; 5, male genitalia, posterior view; 6, ditto, lateral view. Scales: 0.25 mm.

eye; occiput black; 1st to 2nd antennal segments brown, 3rd segment oval and yellow; arista brown and short-haired; palpi dark brown; basal part of proboscis brown, labella yellow; 1 *oc*, 2 *or*, 3 *vt*, 1 *pvt*.

Thorax: mesonotum black, clothed with short golden hairs; humeral callus, upper part of posterior callus and scutellum yellowish brown; post-scutellum and metanotum glossy black; mesopleuron and sternopleuron black, clothed with minute hairs and with a yellowish spot on area where both pleura adjoin each other; pteropleuron and hypopleuron glossy black without hairs; anatergal callus distinctly protruding, covered with downy hairs on upper part; 1 *n*, 1 *sa*, 1 *pa*, 1 *dc*, 1 *prsc*, 3 *sc*; *h* and *m* absent. Wings: hyaline, with a diffused dark area anteroapically; veins brown; halteres white, darkened basally. Legs: coxae, femora, tibiae and tarsi yellow; fore femur with rows of ventral setulae (Fig. 2); middle femur with a row of ventral setulae in basal two-fifths (Fig. 3); fore tibia with a row of anteroventral short spines (Fig. 2).

Abdomen: tergites wholly black and shiny, clothed with short hairs; 2nd to 4th sternites rectangular; 5th sternite trapezoid; 6th sternite deeply incised, with numerous short spines and a pair of strong spines on both blades (Fig. 4); lateral view of epandrium like as in Fig. 6 and surstylus slender and pointed apically (Fig. 5–6).

Body length. 4.5 mm; wing length, 3.5 mm.

♀. Unknown.

Holotype: ♂, Okryu Valley, Kumgangsan Mts., North Korea, 18 May 1988, M. KOZÁNEK.

Distribution. North Korea.

Remarks. This new species is closely related to *C. leptogaster* PANZER, but differentiated from it in having more slender and pointed surstyli apically and by the shape of 6th sternite in the male.

Loxocera (Loxocera) fulviventris MEIGEN, 1826

Loxocera fulviventris MEIGEN, 1826, Syst. Besch., 5: 365.

The Korean specimens are different from the European and Japanese specimens in having somewhat shorter 3rd antennal segments and blackish mesonotum. But these are considered as intraspecific differences and other characters including male genitalia agreed with those of *fulviventris*.

Specimens examined. 6♂, 3♀, Paekdusan Mts., Samjiyon, 12–18 Aug. 1989, M. KOZÁNEK.

Distribution. Europe, Russia, Japan and North Korea. New to the Korean Peninsula.

Psila (Psila) amurensis SHATALKIN, 1986

Psila (Psila) amurensis SHATALKIN, 1986, Proc. zool. Inst., Leningr., 146: 33.

Specimens examined. 1♂, 1♀, Okryu Valley, Kungangsan Mts., North Korea, 18 May 1988, M. SLOVAK; 5♀, same locality, 12–18 May 1988, M. KOZÁNEK.

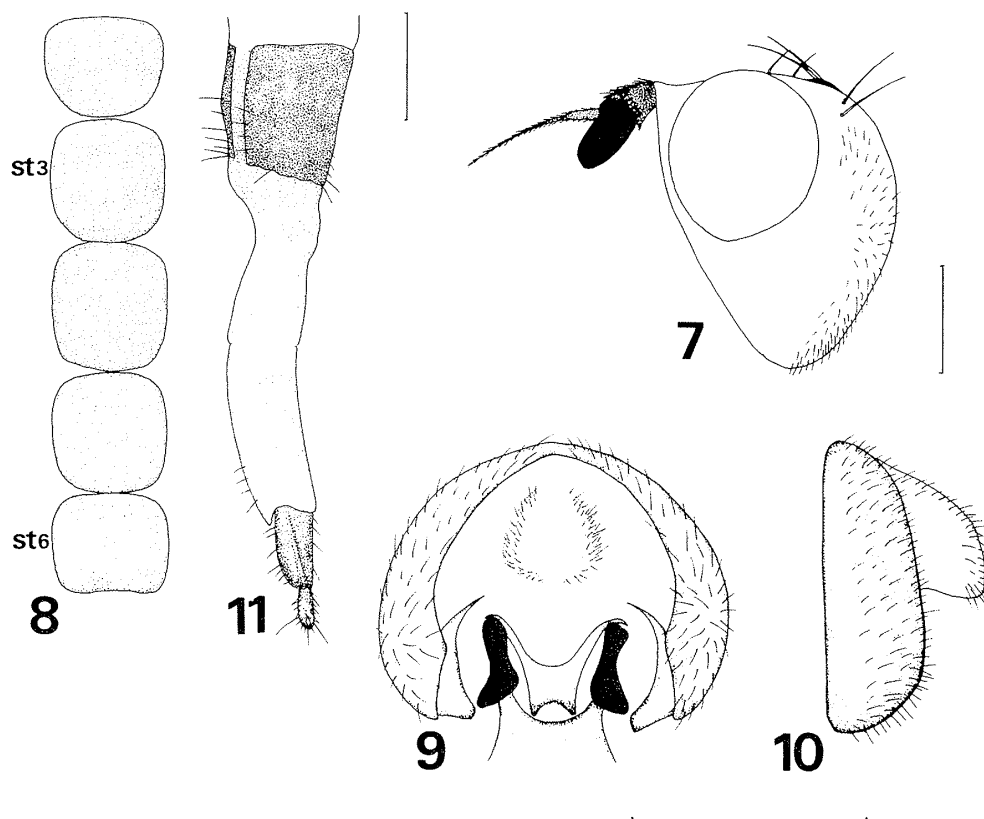
Distribution. Russia (Far East) and North Korea. New to the Korean Peninsula.

Remarks. This species is closely related to *Psila (Psila) fulviseta* IWASA described from Japan, but differs from it in the shapes of parameres and apical part of aedeagus in the male.

Psila (Psila) shatalkini IWASA, n. sp.

(Figs. 7–11)

♂ ♀. Head: eyes reddish brown; frons yellow to light brown with dark



Figs. 7–11. *Psila (Psila) shatalkini* n. sp. — 7, Head, lateral view; 8, abdominal sternites of male; 9, male genitalia, posterior view; 10, ditto, lateral view; 11, female terminalia, lateral view. Scales: 0.25 mm.

area in ocellar triangle; face yellow without black stripe; facial orbit broad and yellow; gena (Fig. 1) yellow to light brown; occiput dark brown; 1st to 2nd antennal segments brown, 3rd segment oval-shaped and dark brown to black (Fig. 1); arista brown and short-haired; palpi brown, darkened apically; proboscis brown; 1 *oc*, 2 *or*, 2 *vt*, 1 *pvt* (these setae brown).

Thorax: mesonotum black, shiny and clothed with minute hairs; scutellum black and shiny; humeral callus, all pleuron and metanotum black and shiny; 1 *n*, 1 *sa*, 1 *pa*, 1 *dc*, 1 *sc* (these setae brown). Wings: hyaline, slightly tinged with light brown; veins light brown; halteres whitish, darkened basally. Legs: all coxae, trochanters, femora and tibiae yellow; tarsi yellow, darkened apically.

Abdomen: tergites wholly black, shiny and sparsely with downy hairs; sternites large and non-angular square-shaped (Fig. 8); male epandrium narrow laterally (Fig. 10); male aedeagus short (Fig. 9); male parameres strongly pigmented (Fig. 9); female ovipositor soft, 9th segment and cerci pigmented with brown (Fig. 11).

Body length: ♂ ♀, 4.5–5 mm; wing length, 4.2 mm.

Holotype: ♂, Mt. Paekdu, Paekdusan Mts., North Korea, 16 Aug. 1989, M. KOZÁNEK. Paratypes: 1 ♀, same data as holotype, M. KOZÁNEK.

Distribution. North Korea.

Remarks. This new species is closely related to *Psila* (*Psila*) *limbatella* ZETTERSTEDT, but differs from it in having 2 *vt* and 2 *or* (3 *vt* and 1 *or* in *limbatella*) and by the shape of male aedeagus and parameres. This species is also related to *P. (P.) nigricornis* MEIGEN, but differs from it in having 2 *vt* and 1 *dc* (3 *vt* and 2 *dc* in *nigricornis*) and by the shape of male epandrium and aedeagus.

Psila (*Psila*) *tenebrica* SHATALKIN, 1986

Psila (*Psila*) *tenebrica* SHATALKIN, 1986 Proc. zool. Inst., Leningr., 146: 37.

Specimens examined. 5♂, 13♀, Manmulsang, Kumgangsan Mts., 26 May 1988, M. SLOVAK.

Distribution. Russia (Far East) and North Korea. New to the Korean Peninsula.

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European specimens of Psilidae. We are grateful to Dr. M. SLOVAK of Slovak Academy of Sciences, Slovakia, for his kindness in offering the valuable materials. Our thanks are also due to Prof. K. HORI of Obihiro University of Agriculture and Veterinary Medicine for reading the manuscript.

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